

Appl. No. 10/083,001
Amdt. dated April 8, 2004
Reply to Office Action of February 11, 2004

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1.(PRESENTLY AMENDED) A closure for use with a container having a neck portion and container threading formed thereon, comprising:

a top wall;

an annular skirt depending from the top wall and having closure threading formed on an inner surface thereof configured and arranged to threadably engage the container threading; and

at least one flexible anti-backoff member extending circumferentially on the skirt in a region of the closure threading and being arranged and configured to deflect and frictionally engage the container threading between the anti-backoff member and the closure threading to resist movement of the closure once secured onto the neck of the container;

wherein a lead angle of the at least one anti-backoff member is different from a lead angle of the closure threading;

wherein a width of the at least one anti-backoff member is greater than a thickness thereof, the width being measured generally perpendicular to the skirt from a root

Appl. No. 10/083,001
Arndt. dated April 8, 2004
Reply to Office Action of February 11, 2004

of the anti-backoff member adjacent to the skirt to a distal end of the anti-backoff member and the thickness being measured at the root of the anti-backoff member generally parallel to the skirt.

2.(PRESENTLY AMENDED) A closure for use with a container having a neck portion and container threading formed thereon, comprising:

a top wall;

an annular skirt depending from the top wall and having closure threading formed on an inner surface thereof configured and arranged to threadably engage the container threading; and

at least one flexible anti-backoff member extending circumferentially on the skirt in a region of the closure threading and being arranged and configured to deflect and frictionally engage the container threading between the anti-backoff member and the closure threading to resist movement of the closure once secured onto the neck of the container;

wherein a lead angle of the at least one anti-backoff member is different from a lead angle of the closure threading;

The closure of claim 1, wherein the at least one anti-backoff member forms an integral extension of a portion of the closure threading.

Appl. No. 10/083,001
Amdt. dated April 8, 2004
Reply to Office Action of February 11, 2004

3.(PRESENTLY AMENDED) A closure for use with a container having a neck portion and container threading formed thereon, comprising:

a top wall;

an annular skirt depending from the top wall and having closure threading formed on an inner surface thereof configured and arranged to threadably engage the container threading; and

at least one flexible anti-backoff member formed in a region of the closure threading and being arranged and configured to deflect and frictionally engage the container threading between the anti-backoff member and the closure threading to resist movement of the closure once secured onto the neck of the container;

wherein the at least one anti-backoff member is oriented generally parallel to the top wall of the closure;

wherein a width of the at least one anti-backoff member is greater than a thickness thereof, the width being measured generally perpendicular to the skirt from a root of the anti-backoff member adjacent to the skirt to a distal end of the anti-backoff member and the thickness being measured at the root of the anti-backoff member generally parallel to the skirt.

Appl. No. 10/083,001
Amdt. dated April 8, 2004
Reply to Office Action of February 11, 2004

4.(PRESENTLY AMENDED) The closure of claim 4 2, wherein the at least one anti-backoff member forms an integral extension of an uppermost portion of the closure threading.

5.(PREVIOUSLY PRESENTED) A closure for use with a container having a neck portion and container threading formed thereon, comprising:

a top wall;

an annular skirt depending from the top wall and having closure threading formed on an inner surface thereof configured and arranged to threadably engage the container threading; and

at least one anti-backoff member extending circumferentially on the skirt in a region of the closure threading and being arranged and configured to frictionally engage the container threading between the anti-backoff member and the closure threading to resist movement of the closure once secured onto the neck of the container;

wherein an angular inclination of the at least one anti-backoff member is different from an angular inclination of the closure threading, and the at least one anti-backoff member forms an integral extension of an uppermost portion of the closure threading and is oriented generally parallel to the top wall of the closure.

Appl. No. 10/083,001
Amdt. dated April 8, 2004
Reply to Office Action of February 11, 2004

6.(PRESENTLY AMENDED) The closure of claim ~~1~~ 2, wherein the closure threading is segmented into a plurality of circumferentially spaced closure threading groups, and wherein at least one of the closure threading groups has the at least one anti-backoff member associated therewith.

7.(PREVIOUSLY PRESENTED) The closure of claim 6, wherein the at least one anti-backoff member forms an integral extension of a portion of the closure threading in at least one of the closure threading groups.

8.(ORIGINAL) The closure of claim 7, wherein the at least one anti-backoff member is oriented generally parallel to the top wall of the closure.

9.(PREVIOUSLY PRESENTED) The closure of claim 6, wherein the at least one anti-backoff member forms an integral extension of an uppermost portion of the closure threading in at least one of the closure threading.

10.(ORIGINAL) The closure of claim 9, wherein the at least one anti-backoff member is oriented generally parallel to the top wall of the closure.

Appl. No. 10/083,001
Amdt. dated April 8, 2004
Reply to Office Action of February 11, 2004

11.(PRESENTLY AMENDED) The closure of claim 4, wherein the at least one anti-backoff member has a depth relative to an inner surface of the annular skirt that exceeds a depth of the closure threading relative to the inner surface of the annular skirt.

12.(PREVIOUSLY PRESENTED) A closure for use with a container having a neck portion and container threading formed thereon, comprising:

a top wall;

an annular skirt depending from the top wall and having closure threading formed on an inner surface thereof configured and arranged to threadably engage the container threading, the closure threading being segmented into a plurality of circumferentially spaced closure threading groups;

a plurality of anti-backoff members each formed in a region of the closure threading in at least one of the closure threading groups, extending circumferentially on the skirt and being arranged and configured to frictionally engage the container threading between the anti-backoff member and the closure threading to resist movement of the closure once secured onto the neck of the container;

wherein an angular inclination of the at least one anti-backoff member is different from an angular inclination of the closure threading.

Appl. No. 10/083,001
Armdt. dated April 8, 2004
Reply to Office Action of February 11, 2004

13.(PREVIOUSLY PRESENTED) The closure of claim 12, wherein the plurality of anti-backoff members form integral extensions of a portion of the closure threading in at least one of the closure threading groups.

14.(ORIGINAL) The closure of claim 13, wherein the plurality of anti-backoff members are oriented generally parallel to the top wall of the closure.

15.(PREVIOUSLY PRESENTED) The closure of claim 12, wherein the plurality of anti-backoff members form integral extensions of an uppermost portion of the closure threading in at least one of the closure threading groups.

16.(ORIGINAL) The closure of claim 15, wherein the plurality of anti-backoff members are oriented generally parallel to the top wall of the closure.

17.(PREVIOUSLY PRESENTED) A closure for use with a container having a neck portion and container threading formed thereon, comprising:

a top wall;

an annular skirt depending from the top wall and having closure threading formed on an inner surface thereof configured and arranged to threadably engage the container threading; and

Appl. No. 10/083,001
Amdt. dated April 8, 2004
Reply to Office Action of February 11, 2004

a plurality of anti-backoff members formed in a region of the closure threading and being arranged and configured to frictionally engage the container threading between the anti-backoff member and the closure threading to resist movement of the closure once secured onto the neck of the container;

wherein the closure threading is segmented into a plurality of circumferentially spaced closure threading groups, and wherein at least one of the closure threading groups has at least one of the anti-backoff members associated therewith;

wherein the plurality of anti-backoff members are formed in a region of the closure threading in at least one of the closure threading groups;

wherein each of the plurality of anti-backoff members has a depth relative to an inner surface of the annular skirt that exceeds a depth of the closure threading relative to the inner surface of the annular skirt.

18.(PREVIOUSLY PRESENTED) A closure for use with a container having a neck portion and container threading formed thereon, comprising:

a top wall;

an annular skirt depending from the top wall and having closure threading formed on an inner surface thereof configured and arranged to threadably engage the container threading; and

Appl. No. 10/083,001
Amdt. dated April 8, 2004
Reply to Office Action of February 11, 2004

at least one anti-backoff member formed as an integral extension of a portion of the closure threading and extending in a circumferential direction about the annular skirt, the at least one anti-backoff member being arranged and configured to frictionally engage the container threading in an axial direction on the skirt between the anti-backoff member and the closure threading to resist movement of the closure once secured onto the neck of the container;

wherein a lead angle of the at least one anti-backoff member is different from a lead angle of the closure threading.

19.(PREVIOUSLY PRESENTED) A closure for use with a container having a neck portion and container threading formed thereon, comprising:

a top wall;

an annular skirt depending from the top wall and having closure threading formed on an inner surface thereof configured and arranged to threadably engage the container threading; and

at least one anti-backoff member formed as an integral extension of a portion of the closure threading and extending in a circumferential direction about the annular skirt, the at least one anti-backoff member being arranged and configured to frictionally engage the container threading in an axial direction on the skirt between the anti-backoff member

Appl. No. 10/083,001
Amdt. dated April 8, 2004
Reply to Office Action of February 11, 2004

and the closure threading to resist movement of the closure once secured onto the neck of the container;

wherein the at least one anti-backoff member is oriented generally parallel to the top wall of the closure.

20.(ORIGINAL) The closure of claim 18, wherein the closure threading is segmented into a plurality of circumferentially spaced closure threading groups, and wherein at least one of the closure threading groups has at least one of the anti-backoff members associated therewith.

21.(ORIGINAL) The closure of claim 20, wherein the at least one anti-backoff member forms an integral extension of a portion of the closure threading in at least one of the closure threading groups and extends in a circumferential direction about the annular skirt.

22.(ORIGINAL) The closure of claim 21, wherein the at least one anti-backoff member is oriented generally parallel to the top wall of the closure.

23.(PREVIOUSLY PRESENTED) A closure for use with a container having a neck portion and container threading formed thereon, comprising:

a top wall;

Appl. No. 10/083,001
Amdt. dated April 8, 2004
Reply to Office Action of February 11, 2004

an annular skirt depending from the top wall and having closure threading formed on an inner surface thereof configured and arranged to threadably engage the container threading; and

at least one anti-backoff member formed as an integral extension of a portion of the closure threading and extending in a circumferential direction about the annular skirt, the at least one anti-backoff member being arranged and configured to frictionally engage the container threading between the anti-backoff member and the closure threading to resist movement of the closure once secured onto the neck of the container;

wherein the at least one anti-backoff member has a depth relative to an inner surface of the annular skirt that exceeds a depth of the closure threading relative to the inner surface of the annular skirt;

wherein a lead angle of the at least one anti-backoff member is different from a lead angle of the closure threading.

24.(ORIGINAL) The closure of claim 20 further comprising a plurality of anti-backoff members formed in at least one of the closure threading groups.

25.(ORIGINAL) The closure of claim 24, wherein the plurality of anti-backoff members are oriented generally parallel to the top wall of the closure.

Appl. No. 10/083,001
Amdt. dated April 8, 2004
Reply to Office Action of February 11, 2004

26.(PREVIOUSLY PRESENTED) A closure for use with a container having a neck portion and container threading formed thereon, comprising:

a top wall;

an annular skirt depending from the top wall and having closure threading formed on an inner surface thereof configured and arranged to threadably engage the container threading; and

a plurality of anti-backoff members each formed as an integral extension of a portion of the closure threading and extending in a circumferential direction about the annular skirt, each anti-backoff member being arranged and configured to frictionally engage the container threading between the anti-backoff member and the closure threading to resist movement of the closure once secured onto the neck of the container;

wherein the closure threading is segmented into a plurality of circumferentially spaced closure threading groups, and wherein at least one of the closure threading groups has at least one of the anti-backoff members associated therewith;

wherein each of the plurality of anti-backoff members has a depth relative to an inner surface of the annular skirt that exceeds a depth of the closure threading relative to the inner surface of the annular skirt;

wherein a lead angle of each of the anti-backoff members is different from a lead angle of the closure threading.

Appl. No. 10/083,001
Amdt. dated April 8, 2004
Reply to Office Action of February 11, 2004

27.(PRESENTLY AMENDED) A closure and container assembly, comprising:

 a container having a neck portion and container threading formed thereon;

 a closure having a top wall, an annular skirt depending from the top wall and having closure threading formed on an inner surface thereof configured and arranged to threadably engage the container threading; and

 at least one flexible anti-backoff member extending circumferentially in a region of one of the closure threading and the container threading and being arranged and configured to deflect and frictionally engage the other of the container threading and the closure threading to resist movement of the closure once secured onto the neck of the container;

 wherein a lead angle of the at least one anti-backoff member is different from a lead angle of at least one of the closure threading and the container threading;

wherein a width of the at least one anti-backoff member is greater than a thickness thereof, the width being measured generally perpendicular to the skirt from a root of the anti-backoff member adjacent to the skirt to a distal end of the anti-backoff member and the thickness being measured at the root of the anti-backoff member generally parallel to the skirt.

Appl. No. 10/083,001
Amdt. dated April 8, 2004
Reply to Office Action of February 11, 2004

28.(PRESENTLY AMENDED) The assembly of claim 27 wherein the anti-backoff member is formed on the neck portion of the container and the thickness of the anti-backoff member is generally constant.

29.(PRESENTLY AMENDED) The assembly of claim 27 wherein the anti-backoff member is formed on the annular skirt of the closure and the thickness of the anti-backoff member is generally constant.

30.(PREVIOUSLY PRESENTED) A closure and container assembly, comprising:

a container having a neck portion and container threading formed thereon;

a closure having a top wall, an annular skirt depending from the top wall and having closure threading formed on an inner surface thereof configured and arranged to threadably engage the container threading; and

at least one anti-backoff member formed as an integral extension of a portion of the closure threading and extending in a circumferential direction about the annular skirt, the at least one anti-backoff member being arranged and configured to frictionally engage the container threading in an axial direction on the skirt between the anti-backoff member and the closure threading to resist movement of the closure once secured onto the neck of the container;

Appl. No. 10/083,001
Amdt. dated April 8, 2004
Reply to Office Action of February 11, 2004

wherein a lead angle of the at least one anti-backoff member is different from a lead angle of the closure threading.

31.(CANCELED)

32.(PRESENTLY AMENDED) The combination of claim 27 wherein the at least one anti-backoff member is generally planar and oriented generally parallel to the top wall when the closure is secured onto the neck of the container.

33.(PREVIOUSLY PRESENTED) The assembly of claim 30 wherein the at least one anti-backoff member is flexible and deflects when engaged with the container threading.